

## Abstract

An arrayed waveguide grating having a preferable aligning work property with an optical fiber on a connecting partner side and able to restrain the temperature dependence of a center wavelength of transmitting light is provided. An input end (35) of the optical input waveguide (2) of the arrayed waveguide grating is terminated on a first end face (18), and an output end (36) of the optical output waveguides (6) is terminated on a second end face (19). The first slab waveguide (3) is separated into separating slab waveguides (3a, 3b) on a separating face (8) crossing a path of propagating light. The separating face (8), the first end face (18) and the second end face (19) are set to be opposed to each other. A high thermal expansion coefficient member (7) is arranged on a lower side of the separating slab waveguide (3a). A low thermal expansion plate member (40) is arranged on a lower side of the separating slab waveguide (3b). A side of the separating slab waveguide (3a) is slid and moved along the separating face (8) by thermal expansion and contraction of the high thermal expansion coefficient member (7).